

Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in the application.

Listing of Claims:

Claims 1-97 (canceled).

Claim 98 (new): A method of inducing an antigen-specific immune response to an antigen comprising applying a formulation to skin of a subject, wherein the formulation comprises an antigen and an adjuvant, wherein the formulation is applied in dry form.

Claim 99 (new): The method of claim 98, wherein the formulation consists essentially of the antigen and the adjuvant.

Claim 100 (new): The method of claim 98, wherein the antigen is a nucleic acid, carbohydrate, a glycolipid, a glycoprotein, a lipid, a lipoprotein, phospholipid, a polypeptide, a protein, a fusion protein, or chemical conjugate of a combination thereof.

Claim 101 (new): The method of claim 98, wherein the antigen is derived from a pathogen.

Claim 102 (new): The method of claim 101, wherein the pathogen is a virus, a bacterium, a parasite, or a fungus.

Claim 103 (new): The method of claim 102, wherein the virus is an influenza virus or a rabies virus.

Claim 104 (new): The method of claim 103, wherein the antigen is an influenza antigen.

Claim 105 (new): The method of claim 102, wherein the bacterium is *E. coli* or *Bacillus*

anthracis.

Claim 106 (new): The method of claim 105, wherein the antigen is *E. coli* heat-labile enterotoxin (LT).

Claim 107 (new): The method of claim 105, wherein the antigen is a nucleic acid encoding *E. coli* heat-labile enterotoxin (LT).

Claim 108 (new): The method of claim 98, wherein the antigen is a pathogen.

Claim 109 (new): The method of claim 108, wherein the pathogen is a virus, a bacterium, a parasite, or a fungus.

Claim 110 (new): The method of claim 109, wherein the virus is a whole virus, live virus, an attenuated live virus, or an inactivated virus.

Claim 111 (new): The method of claim 110, wherein the virus is an influenza virus or a rabies virus.

Claim 112 (new): The method of claim 111, wherein the influenza virus comprises expresses a glycoprotein.

Claim 113 (new): The method of claim 112, wherein the glycoprotein is the influenza antigen.

Claim 114 (new): The method of claim 109, wherein the bacterium is *E. coli* or *Bacillus anthracis*.

Claim 115 (new): The method of claim 114, wherein the *E. coli* comprises *E. coli* heat-labile enterotoxin (LT).

Claim 116 (new): The method of claim 98, wherein the antigen is a multivalent antigen.

Claim 117 (new): The method of claim 98, wherein the adjuvant comprises a molecule selected from the group consisting of a bacterial ADP-ribosylating exotoxin (bARE), a binding B subunit of a bARE, a toxoid of a bARE, a genetically altered bARE, a genetically detoxified mutant of a bARE, and a chemically conjugated bARE.

Claim 118 (new): The method of claim 117, wherein the antigen is an influenza antigen.

Claim 119 (new): The method of claim 98, wherein the adjuvant is a nucleic acid encoding a molecule selected from the group consisting of a bacterial ADP-ribosylating exotoxin (bARE), a binding B subunit of a bARE, a toxoid of a bARE, a genetically altered bARE, and a genetically detoxified mutant of a bARE.

Claim 120 (new): The method of claim 119, wherein the nucleic acid encodes *E. coli* heat-labile enterotoxin (LT).

Claim 121 (new): The method of claim 98, wherein the antigen and the adjuvant is a single molecule.

Claim 122 (new): The method of claim 121, wherein the molecule is *E. coli* heat-labile enterotoxin (LT).

Claim 123 (new): The method of claim 121, wherein the molecule is an influenza antigen.

Claim 124 (new): The method of 98, wherein the formulation is applied using a patch.

Claim 125 (new): The method of claim 98, wherein the adjuvant is selected from the group consisting of nucleic acid, bacterial exotoxin, cytokine, chemokine, lipopolysaccharide, a molecule containing unmethylated CpG dinucleotides, a heat shock protein, a derivative of a heat

shock protein, tumor necrosis factor, genetically detoxified toxin, and combinations thereof.

Claim 126 (new): The method of claim 98, wherein the adjuvant is provided as a nucleic acid comprising a sequence encoding the adjuvant.

Claim 127 (new): The method of claim 98, wherein the antigen or adjuvant activates an antigen presenting cell.

Claim 128 (new): The method of claim 127, wherein the antigen presenting cell is a Langerhans cell or a dermal dendritic cell.

Claim 129 (new): The method of claim 98, wherein the antigen is a whole microorganism, a whole cell, or a virion.

Claim 130 (new): The method of claim 98, further comprising pretreating the skin.

Claim 131 (new): The method of claim 130, wherein the skin is pretreated physically or chemically to enhance immunization.

Claim 132 (new): The method of claim 131, wherein the skin is pretreated by applying alcohol to the skin prior to application of the formulation.

Claim 133 (new): The method of claim 98, wherein the formulation is applied with an occlusive dressing.

Claim 134 (new): The method of claim 133, wherein the occlusive dressing comprises an adhesive surface.

Claim 135 (new): The method of claim 134, wherein the adhesive surface comprises the formulation.

Claim 136 (new): The method of claim 133, wherein the occlusive dressing covers a surface area of the skin which is larger than at least one draining lymph node field.

Claim 137 (new): The method of claim 98, wherein the formulation is applied with a patch.

Claim 138 (new): The method of claim 137, wherein the patch comprises a matrix for holding the formulation.

Claim 139 (new): The method of claim 138, wherein the matrix comprises rayon.

Claim 140 (new): The method of claim 98, wherein the formulation comprises a sugar.

Claim 141 (new): The method of claim 140, wherein the formulation comprises one or more sugars.

Claim 142 (new): The method of claim 141, wherein one of the sugars is sucrose.

Claim 143 (new): The method of claim 142, wherein the sugars are sucrose and trehalose.

Claim 144 (new): The method of claim 143, wherein the formulation is applied with a patch.

Claim 145 (new): The method of claim 144, wherein the patch comprises a matrix for holding the formulation.

Claim 146 (new): The method of claim 145, wherein the matrix comprises rayon.